ABSTRACT

DATA COMMUNICATION

A data communications system for communicating a data signal formed of successive data elements, said system comprising a transmission node; a reception node; and a link providing a data connection from said transmission node to said reception node; in which: said transmission node comprises a clock signal transmitter for transmitting a synchronisation clocking signal to said reception node via said link, said synchronisation clocking signal having synchronising features occurring at a frequency lower than a data element rate; an assembler for assembling elements of said data signal into data frames, each data frame having a plurality of successive data elements of said data signal, for transmission to said reception node via said link, said assembler being responsive to said synchronisation clocking signal so as to set a synchronisation flag associated with a data element having a first predetermined temporal relationship with a synchronising feature of said synchronisation clocking signal; and said reception node comprises: a detector detecting a synchronising feature of said synchronisation clocking signal received from said transmission node; a disassembler for disassembling received data frames to regenerate said data signal, said disassembler being operable to detect a data element associated with a set synchronisation flag; an output unit for outputting a data element associated with a set synchronisation flag at a second predetermined temporal relationship with respect to said synchronising feature of said received synchronisation clocking signal; said first and second predetermined temporal relationships being arranged so that a predetermined system latency exists between input of a data element to said transmission node and subsequent output of that data element by said reception node.

Figure 32.